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W. L. Morris.

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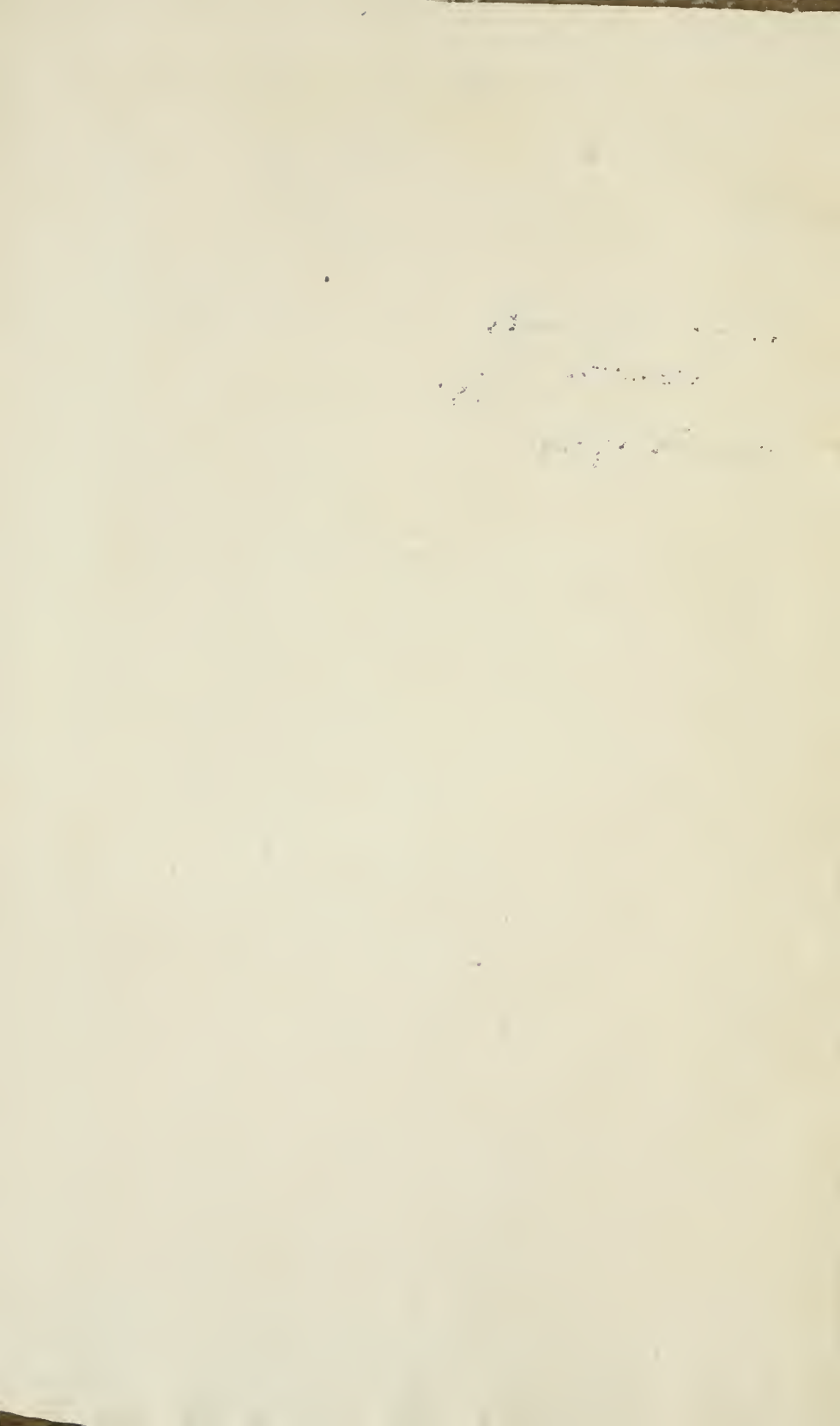
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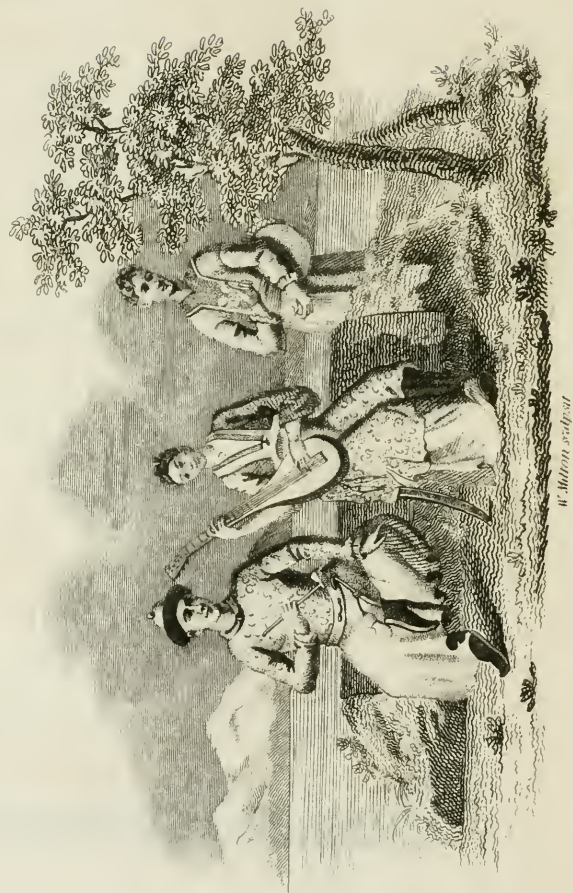
CHINA,
ITS
COSTUME, ARTS,
&c.

VOL. II.

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THE EMPEROR'S ELDEST SON with HIS WIFE.

CHINA:
ITS
Costume,
ARTS, MANUFACTURES,
&c.

EDITED PRINCIPALLY FROM THE ORIGINALS IN
THE CABINET OF THE LATE

M. BERTIN;

WITH
OBSERVATIONS
EXPLANATORY, HISTORICAL, AND LITERARY,

By M. BRETON.

TRANSLATED FROM THE FRENCH.

IN FOUR VOLUMES.

VOL. II.

EMBELLISHED WITH PLATES.

LONDON:

PRINTED FOR J. J. STOCKDALE,
41, PALL MALL.

1812.



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CHINA,
ITS COSTUME, ARTS,
&c.

THE EMPEROR'S ELDEST SON, WITH HIS
WIFE AND HER ATTENDANT, IN THE
GARDENS OF YUEN-MING-YUEN.

(See the Frontispiece.)

THE eldest son of the emperor of China has no external distinction from his brothers, unless, which is rarely the case, his father has, during his own life, declared him his heir.

The Chinese do not take the same pleasure in the promenade as Europeans.

They do not go into the gardens for salutary exercise, but they make choice of some picturesque spot, where they sit and breathe the fresh air, and enjoy the perfume of the flowers.

They do not, in their gardens, as in those of Europe, assemble a select society; no mixed company there divides into different groups for walking or for conversation. There is only one occasion on which a whole company, and that consisting entirely of men, meets in a garden, and that is, at particular great feasts, in the interval between the dinner and dessert. All the guests then leave the banquet-room together, and repair to the garden, under a gallery, illuminated with a prodigious number of lanterns. The domestics bring water in large silver bowls, when the visitors wash their faces and hands, and again return to the room to partake of the succeeding part of the entertainment.

On other occasions, the husband passes some pleasant moments with his wife and family in the garden; the wife plays music, and the children amuse themselves with plays suitable to their years.

The members of the imperial family have not, in this respect, any rule of conduct different from others. It has been already stated, that the park at Yuen-Ming-Yuen is divided into various palaces, with their appropriate gardens. The emperor's sons reside in that which is allotted to them; they there live in a family way, without ambition and without intrigue, because they enjoy no particular credit, and are almost denied communication with the ministers and other members of the government.

During the obsequies of the late emperor, one of the princes of the blood having desired the attendance of a Ko-Lao, or minister, whom he wished to question on some subjects, the Ko-Lao

approached, and, contrary to custom, returned an answer kneeling. On the following day the prince and the Ko-Laos were denounced to the emperor, and reprimanded; the prince, for having permitted a magistrate of that rank to assume, in his presence, so humble a posture; and the Ko-Laos, for having suffered one of their fraternity to dishonour the first office of the empire.

Formerly, says Duhalde, when the princes of the blood were dispersed in the provinces, the officers of the crown sent them their revenues every quarter; that, expending it as fast as they received it, they might not think of suffering its accumulation, or of making reserves, of which they might avail themselves to sow discontents: they were even forbidden, on pain of death, to quit the place allotted for their residence. Since, however, the Tartars have made themselves masters of China, a different arrangement has been pursued. The emperor has

thought it preferable to retain all the princes, at court, under his own eye. Besides their household expenses, which are supplied from the imperial treasury, they have lands, houses, and revenues; their money is entrusted to their servants, and some of them are very rich.

The princes of the blood, not being the sons of the emperor, are divided into five orders; their ordinary function is to assist at public ceremonies, and to appear, every morning, at the emperor's palace, after which they retire to their houses. They are not permitted to visit each other, nor to sleep out of the city, without express permission.

AN ITINERANT BOOKSELLER.



CHINA has its booksellers' shops and warehouses like those of Europe: the subject of this is a stall or pedlar bookseller; he does not deal in classical books, but in tales and song-books for the lower orders.

The Chinese novels, in general, are instructive and entertaining; and the matter of their ballads runs principally on the rules of politeness, duties of civil life, and moral maxims.

The books sold at stalls are mostly put up in decent grey or yellow boards. Those which are kept in shops are more expensively bound in fine silk or satin, ornamented with flower-work. Some are bound in red brocade flowered with gold or silver, and lettered on the side. It is remarkable that



A Freschi sculpsit

AN ITINERANT BOOKSELLER.

Pub. 25 April 1812 by LL Stockdale, 41 Pall Mall

it is not customary to letter them on the back, but on the flat side of the cover.

Every country has its custom. In Spain the books of the Escorial library are lettered on the edges of the leaves, because the original owner of the library, Arias Montanus, a learned Spaniard of the sixteenth century, who afterwards presented it to government, was near-sighted, and he read the titles in large characters on the edges, better than in small letters on the back; and thence, consequently, the books are laid on their sides with their edges outwards, as we find by Bourgoing's *Modern State of Spain*, vol. i. page 240, London edition.

Fine works, in China, are sometimes embellished with drawings, very tastefully executed, and particularly remarkable for clearness and brilliancy of colour. It is singular that the Chinese, who have so long been in possession of the art of writing and printing, should have

no knowledge of stroke-engraving; they are acquainted only with engraving on wood, and copper and other metals would be, in a manner, an innovation.

The paper on which they print being very thin, as will be explained in the course of the volume, will only bear the impression to be taken on one side. In sewing the leaves together and making them into books, they are folded twice, so that the fold is outwards, and the two extremities open from the side of the back where they are sewed; therefore Chinese books are cut at the back, while the edges of ours are cut. The extremity of these edges is bound with silk edging, or merely with white twisted paper rolled between the fingers, like the head-bands of European bound books.

When a work makes many volumes, each volume, or rather each number, is covered with a sheet of coloured paper.

These volumes are put together between pasteboards, called Tao.

The Chinese method of binding has given rise to the following fable—A man, whose name was Pung, lived to the age of eight hundred years. He married successively seventy-two wives. The seventy-second having also died, when she entered into the other world, inquired of Pung's ancestors what could be the reason of her husband living so many centuries. "Is it," added she, "that his name has not been written in the registers of Yen-Vang (the god of death)? None surely can escape him?"—"I will unravel this mystery for you," answered the grandfather of Pung: "both the name and surname of my grandson, your husband, are really entered in the book, but I will tell you how they are entered. When the leaves of the book were to be put together, the officers whose business this was, took, by mistake, the leaf on which Pung's destiny was written, twisted it

into a head-band, and the book was bored and sewed with it." His wife could not keep the secret, and the story reached Yen-Vang's ears; having taken the book and examined the head-band, he erased the name of Pung, whose life concluded at that moment.

Europe excepted, no nation has published so many books as China; it has publications on every subject—agriculture, war, the liberal and mechanical arts, particular histories, philosophy, astronomy, &c.

The Chinese have their tragedies, comedies, and romances (many of which closely approximate our old chivalrous romances), and elegant discourses on a variety of subjects. The literati have great facility and taste of composition. The bonzes also have their pious books and legends, which they disseminate assiduously, to avail themselves of the

popular credulity, and to augment their own revenues.

The dynasties of Tcheou, Han, Tang, Song, and Ming, embrace the most splendid periods of Chinese literature.

Under the Leang dynasty, the imperial library consisted of 370,000 volumes.

The Chinese have their Pliny, Linnæus, Lacepede, Jussieu, and Buffon. They have an immense herbal, in two hundred and sixty volumes, from which our literary men would doubtless reap an ample harvest of new observations and discoveries.

Nothing is more revered by the Chinese than the five books which they call Ou-King, and which they esteem sacred.

Among the authors who have commented on these antique originals, Confucius is the most distinguished; the

Chinese consider him likewise as the head of their sages, their teacher, legislator, and the oracle of emperors and kings. They incessantly apply themselves to the study of the principles and maxims which that philosopher has left, and which have been collected into twelve books, which the Chinese look upon as the source and guidance of perfect government.

These precious monuments of Chinese antiquity were on the eve of being annihilated in an instant by the orders of the emperor Chi-Hoang-Ti. About three hundred years after the death of Confucius, and two hundred years before the birth of Christ, this prince, so celebrated for his valour, and still more for the great wall which he had built to protect his states from the irruption of the Tartars, took the resolution of extinguishing science, and only to allow a certain number of such books as he considered necessary; viz. those which treated on

agriculture, physic, &c. All others he ordered to be burnt, under pain of death, and he carried his inhumanity so far as to put several doctors to death.

His vanity was not sufficiently gratified by the comparison which had been drawn between him and his predecessors; he pretended to have eclipsed all their glory, and, that posterity might speak only of him, he determined on destroying every vestige of their memory.

As it is more particularly in the *Ou-King*, and in the books of Confucius, that the virtuous deeds of their illustrious emperors are recounted, Chi-Hoang-Ti resolved to prevent their being handed down to posterity; and he soon found pretexts under which to justify such outrageous commands. These books, said he, had their use when the empire was divided into several sovereignties, to enable them to govern the people by the same laws; but now that all parts of the em-

pire are united under one sovereign, it is the same spirit which animates and governs the whole.

He added, that the study of the sciences served only to the promotion of idleness, and to the neglect of agriculture, which is the source of the people's welfare.

In short, according to his views, these books contained the seeds of revolt. Those who made them their constant study, would set themselves up as reformers of the state. J. J. Rousseau could not have discovered a better text than this ordinance for the composition of his famous *Essay on the Danger of the Arts and Sciences*.

The edict was executed, by all the governors, with the greatest rigour. Chi-Hoang-Ti might have reflected that its literal execution was impossible. In the vicinity, were other independent princes,

over whom Chi-Hoang-Ti had but very little power: and besides, how could he think that so many books, dispersed over so vast an extent of territory, were to be collected? A great number of books were saved in course; and the emperor, so far from having attained the end which he proposed, only made his name execrated by posterity.

The modern Chinese deeply regret the loss of so many historical monuments. To this event may be attributed the uncertainty of the Chinese history in the earlier ages: there was a desire to supply the deficiency, and documents were fabricated in consequence. Thus it is, that in seeking to fill up the chasms in Quintus-Curtius, Tacitus, and many other authors, the moderns have frequently fallen into great errors.

The arrangement of the five books of the Ou-King is as follows:

The first, intituled Chou-King, consists of a collection of the annals of different princes, the earliest of which reigned above two thousand years before Jesus Christ.

The second, the Chy-King, is a collection of odes, sonnets, and maxims.

The third, Y-King, comprehends the famous trigrams of Fou-Hi, which are reputed to be the first attempt at Chinese writing.

The fourth, Choung-Chou, is the history of four Chinese princes of the kingdom of Lu, great part of which is written by Confucius.

The fifth is Y-Ky, or a treatise on ceremonies and moral duties.

The Chinese literati look upon the third of these books, the Y-King, as that of which the text is purest, and has been

handed down to them unaltered. This writing is said to have been excepted from the general combustion of books, undoubtedly because, being less intelligible, it was considered less dangerous. The Y-King is regarded, not as the work of a mortal, but of the Divinity himself. Fou-Hi pretended that he saw the elementary figures of it traced on the back of a dragon which arose from a lake. It is this celebrated dragon which has become the device of China, and the ornament of the imperial and principal Chinese dresses, with this difference, that the emperor alone has it with five claws, unless he confers the same right, by presenting a piece of imperial silk, &c. The other dragons have but four claws.

So great, in short, is the veneration of the Chinese for the Y-King, that they assert this book to contain the knowledge of all things visible and invisible: that the study of any other, and not that of

the Y-King, is running after currents and neglecting the source.

The language which prevails is monosyllabic; the number of sounds does not exceed three hundred and fifty, distinguishable by an European; but a Chinese, exercised from his earliest childhood, modulates his voice, and gives to the same monosyllable five or six different sounds; so that he can pronounce twelve or thirteen hundred radical words, which, with those of distinct signification, are sufficient to express all his wants.

To give an idea of the extent to which these shades in the inflexion of the voice are carried, I shall mention an example which my readers will be perfectly familiar with. In the words Totus and Totalitas, the letter O is long, and yet the pronunciation of the first syllable is not precisely the same in both. In Totus, To is pronounced with the mouth somewhat open; in Totalitas, the same syllable is a

shade shorter, as in the English words Total and Totality.

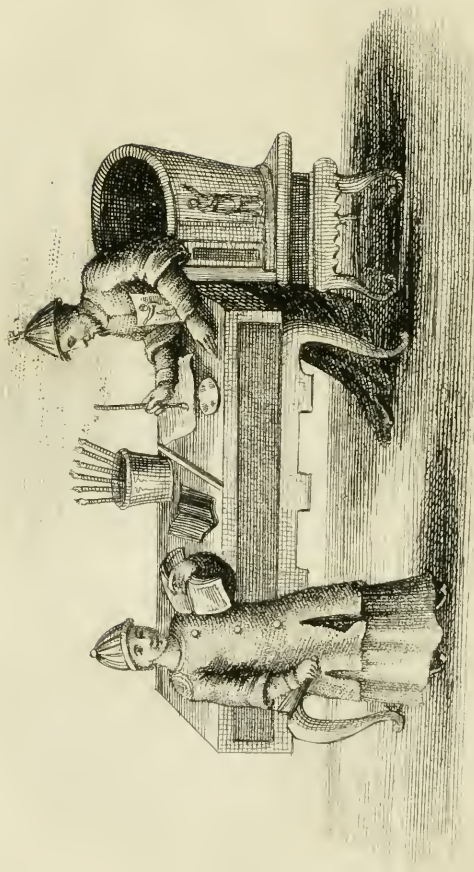
This pronunciation, however, completely varies the sense in the Chinese monosyllables : the word Tchou, spoken with the syllable long, means lord or master ; with the vowel long, in the same tone, it means pig ; if the vowel is pronounced short, kitchen. The word Po has eleven different meanings ; dependent on the inflexion and accent given to it : it signifies glass, to coil, to winnow rice, wise or liberal, to prepare, old woman, to break or cleave, inclined, to water, slave, &c. : other languages, however, have their similar sounding words, though to a less extent.

The Chinese are aware of the confusion to which the similarity of words is liable, and they manage, by their phraseology, to remove every doubt as to their meanings. Their grammar, moreover, is

particularly simple; the verbs, always in the infinitive, are preceded or followed by syllables which indicate their tense and person. The syntax is not more intricate; and this has occasioned Father Magaillans to observe, although the contrary opinion was, and still is very prevalent, "I cannot avoid giving it as my opinion, that the Chinese language is more easily acquired than either the Greek, Latin, or any other European language; at least, it is impossible to deny, all-eloquent as it is, that it is far more easy than that of any of those to which our Company sends missions."

The language of the empire of China was formerly the particular idiom of the province or kingdom of Kiang-Nou, of which Nankin is the capital. It disseminated itself by degrees, and at length prevailed universally throughout every part of the country.





A Pictorial sketch.

CHINESE WRITING.

Pub. 4, 5, May 1842. by J. L. Stoddard, at Paul Mall.

A CHINESE WRITING WITH A PENCIL-
BRUSH.

THE paper and ink which are in use in China, will be subsequently and separately described. In this place, the difference between the Chinese and European mode of writing only will be considered.

They write with brushes made of rabbit-skin; they may be had of all sizes. The handle of the brush is of bamboo, on which, like our pencils or sealing-wax, the name and residence of the maker is superscribed, but by a small label which is stuck upon it.

When the Chinese write, they hold the brush vertically between the thumb, fore and middle finger, so that it rests on the second joint of the fourth, or ring finger.

The little finger is held near the fourth. It is the wrist which bears the weight, and the fingers alone which act. The position is uneasy, and its practice requires habit to render it otherwise.

The Chinese write from the top to the bottom, commencing their page at the right, so that as they go upon a fresh line, the hand covers what they have previously written, and they are forced to take it off entirely if they wish to read the last words. This inconvenience is not so great as might be imagined, their ink drying very fast. All the eastern nations write from the right to the left, and not from the left to the right, as in Europe: the Chinese and Japanese alone use vertical, instead of horizontal lines. The ancient Greeks wrote alternately from right to left, and from left to right, like horses at plough, up one furrow and down another. They termed this kind of writing Boustrophedon.

In this country it is considered a great acquirement to be able to write well; the characters should be small and fine; they should be properly placed, and well chosen, particularly in petitions addressed to the mandarins; the same mark ought not to be repeated in the same composition. This caution is still more requisite in writing to the emperor; for there are particular words which are used solely in addressing him. Lord Macartney's interpreters could not get any writers sufficiently clever to translate the official notes; it was necessary to have recourse to the missionaries, and then to have their foul copy transcribed by Mr. now Sir George Staunton. Few Chinese can be found who are capable of composing a memorial; the least error, a character never so little misplaced, may cause the request to be rejected.

As the hair-pencil retains the ink much better than our pens, less time is lost in taking it, and the liquid is not so soon

exhausted. The Chinese men of science write with a celerity which is scarcely credible, and which can only be conceived by those who have seen a clever shorthand writer taking any thing down.

Although the pencil is generally used for writing, the Tartars adopt a kind of pen made of bamboo, not unlike the European pens in shape. The calamus of the ancients was, in like manner, made from a particular reed of Egypt. The paper in China being prepared almost entirely without alum, and extremely thin, makes it more adapted to the pencil than the pen.

If it is wished to make use of a pen, either for writing, or drawing, in the Chinese manner, flowers, trees, or landscapes, the paper must be previously wetted with a little water, impregnated with alum, to prevent the ink from sinking.

Mr. Barrow says that the writing of the Mantchou Tartars, which is founded on an alphabet, and not on a vocabulary difficult to be retained by the memory, will ultimately gain a preference over that of the Chinese. The Mantchou Tartar characters have this peculiarity, that they are equally legible when reversed.

There is little doubt that Chinese writing was originally neither more nor less than a sketch of the objects which it was wished to speak of: but this method, which would serve when it related to visible things, such as a tree, a bird, or a house, was inadequate to convey an expression of abstract ideas. It was therefore requisite to make signs, which were purely arbitrary, and which had no reference to the thought intended to be depicted.

The Chinese characters are confined to six curved, or rectilinear marks, which, combined two by two, three by three,

&c. admit an immense variety of figures. The whole assemblage of characters is divided into six classes, called Lo-Chou.

To give an idea of the arrangement of the classes, we will mention some words of the fourth class, which comprehends animals and vegetables. All these objects are placed, in some degree, by orders, genera, and species, as in the system of Linnaeus. If they wish to name a duck, the first character designates any winged bird; the second, a water-fowl, &c.

The other classes are nearly similar. The key, or primary character, uniformly indicates the species of the word in question. For example, all expressions in the language, having any reference to fire, include the sign *Ho*, which signifies fire, in their composition. The word *Sai*, which means misfortune, consists of the sign *Mien*, house, and that of fire, because there is no greater calamity than that of seeing one's house on fire.

The word *Ho-am*, which means brilliancy, or splendour, consists of the sign *Am*, signifying a great king, and that of *Ho*, or fire; because nothing exceeds in splendour and magnificence, a great monarch.

The sign which designates a mountain of steep rocks, is formed of *Xan*, a mountain, and the sign of steps, because to mount a steep hill it is necessary to make use of stairs or a ladder.

This is the reason why, in the Chinese language, all the words are classed by words of one, two, three, or more signs.

Every character has its particular name and pronunciation, independently of the words which might serve to compose it. An example of it has already been given, by particularizing the signs which constitute the word Misfortune.

The written language of the Chinese has a just advantage over the oral language, from its being uniform throughout the empire; while the pronunciation varies in different provinces.

The officers who accompanied the English embassy, says Mr. Barrow, could only converse with the mariners of the southern provinces by means of interpreters. The written language is the same in every school in the empire, but the name or sound of the character is different.

The provincial dialects of the different counties of England, are unintelligible in others; but they would not be any more intelligible if written, for those who have a bad pronunciation are generally still worse in their orthography.

The Chinese can neither write nor speak the European languages well; because, on one side, their characters, although apparently numerous, designate

only about three or four hundred syllables, and cannot express any other; and, on the other, they have no B, D, R, X, or Z, in their vocabulary.

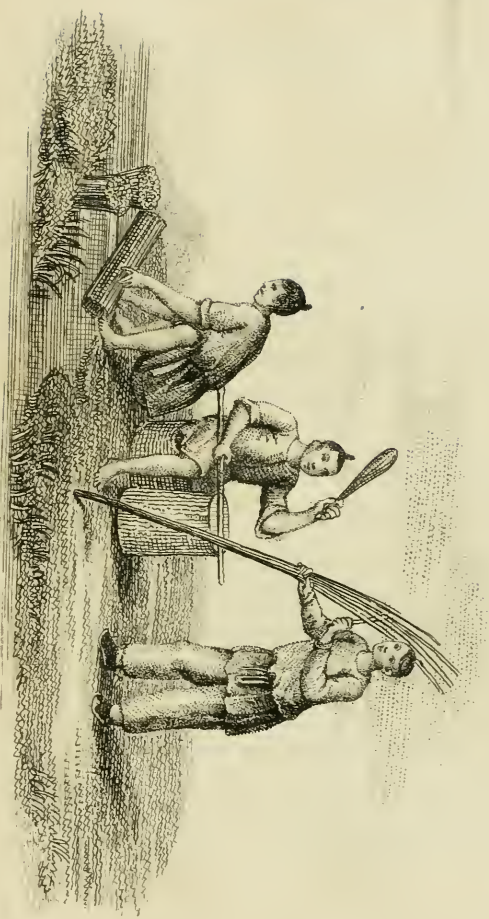
The Abbé Sicard had a young Chinese at Paris, who was met with on board an English ship. His deaf and dumb pupils made him understand them by signs. He was tried to be brought to pronounce the letter B, in which he succeeded tolerably well, but he could never speak *rah*, always saying *lah* instead, and with a very broad accent.

It would be quite futile to attempt to write Chinese words with European characters. We are forced to do it in proper names, but the letters adopted for them are far from conveying the true pronunciation, as every nation, of course, adopts its own orthography.

MANUFACTORY OF PAPER FROM
BAMBOO.

IN the early ages of the empire, the Chinese had no manufactured paper; they wrote on planks, and on large pieces of bamboo. In lieu of the pen or the pencil, they made use of an iron style or needle. They even wrote on metal, and the curious still preserve some ancient plates, on which the characters are very neatly traced.

The discovery of paper, however, has been long since made. Some Europeans, admiring the fineness of its composition, have taken it for silk, but they did not reflect that silk cannot be reduced to a pulp. Animal materials, such as wool, silk, rabbit or beaver skin, may furnish a felt-like substance more or less fine, but



A French subject

PAPER-MAKING.

not a real paper, which can be written upon without the ink running.

The Chinese make their paper with the second pellicle of bamboo and some other plants. This paper is of an almost impalpable fineness, but it is very liable to corruption and moths; the books must be frequently beaten and exposed to the sun to preserve them.

Besides the paper which is made of the bark of trees, they manufacture it likewise of cotton; and this is the whitest, finest, and most in use; it is not subject to the inconveniences above named, and keeps as well as the paper of Europe.

One great advantage of the Chinese paper is, that it is equally white throughout, is made of great length, and is extremely soft and uniform.

A Chinese writer mentioned by Duhalde, speaks of sheets of paper being

made to the length of thirty and fifty feet. The modern make did not come near this size until Fourdrinier's patent was in use ; but this renders the dimensions unlimited.

The consumption of paper in China being so excessive, it is not to be wondered at that it is made from every thing ; besides the paper used for writing and printing, the greater part of the window-sashes are fitted up with it.

The walls and ceilings are covered with paper, white, single-coloured, or variously ornamented. In fact, even in the most sumptuous apartments, nothing but paper is used ; and this is done new every year. The annexed Plate represents only the first process of its manufacture.

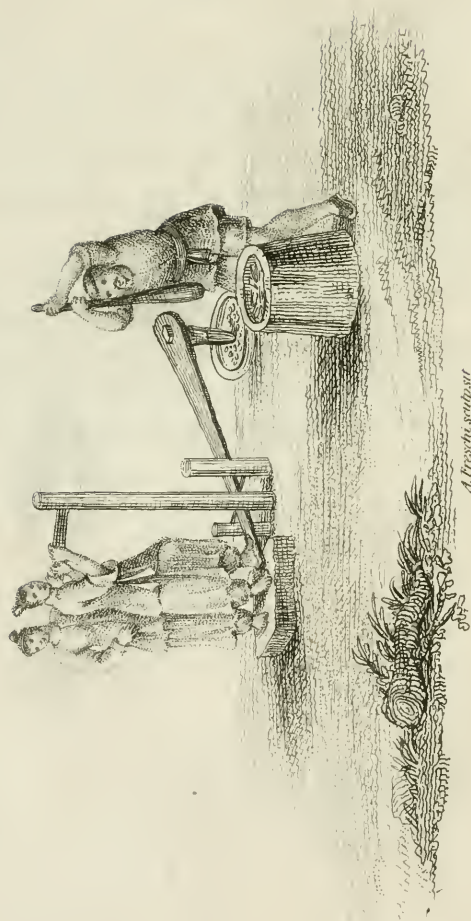
From a bamboo forest are selected the year's shoots, which are about as thick as a man's leg ; their first green pellicle or outer bark is peeled off, they are split

into four, and then divided into narrow strips of six or seven feet in length. It should be observed that the trunk of the bamboo consisting of long straight fibres, it is very easy to split them from top to bottom; whereas to cut them across would be extremely difficult, for it pushes out its shoots in the manner of herbs or grasses, and not like a tree by concentral layers.

They begin by beating these slips with great force, on a wooden block, for the purpose of making them thin. They then put them into a pond of muddy water, where they are left to steep for a fortnight. This operation is intended to dissolve the compact and tenacious parts. When they are taken from this, they undergo a second washing, and are reduced to filaments; they are then dried and bleached in the sun.

While these preparations are going forward in one part of the factory, in

another, the ingredients mixed with the pulp of the bamboo, as necessary parts of the composition of the paper, are got in readiness; these are a glue, prepared from the hao-teng, a glutinous plant, something of the vine kind, which grows in the mountains. They cut some stems of this plant, which, after having been laid to steep three or four days in water, produce an oily and glutinous juice; and this is the glue used for giving the requisite consistency to the paper. The hao-teng glue is made up with the farina or sediment from rice, which is bruised with a pestle, as in the annexed Plate.



A Freshet, sculptor

TAPER MAKING, Second Process.

SECOND PROCESS IN PAPER-MAKING.



WHEN the bamboo has been reduced to shreds, which have been bleached and dried in the sun, they are broken, piled up in a mortar, and exposed to the steam of boiling water. It is then either pounded by a man with all his strength, or the pestle is raised by a lever.

The process is nearly the same when other vegetable substances are used instead of bamboo. Those which are best adapted for it are the trees which contain most sap; as the mulberry, elm, stem of the cotton-shrub, hemp, and others, the names of which are unknown in Europe: such is the *kou-tchou*, a kind of wild mulberry or sycamore.

The superficies of the outer bark, which is greenish, is slightly scraped, and the *liber*, or inner bark, is detached in long thin strips, which are bleached in boiling water and in the sun. (From the word *liber*, as used above, and from which *liber*, or second bark, the ancients made their paper, is derived the Latin word *liber*, and the French, *livre*, which equally signify a book.)

The Chinese also use rice-straw, nettle-stalks, &c. likewise old paper, from which the ink has been extracted : by this latter process, a very great number of old people and children gain their livelihood. The ink in China, being composed of soot and materials purely vegetable, is less durable than ours, which contains a metallic portion, which therefore changes to a rust colour without totally disappearing.

Thin rag paper is made with pieces of old cotton, and undergoes much the

same process as that which is manufactured in Europe.

The renovation of the old paper is effected by a very curious method. The artisans who are employed in it, live in a large village near Pekin. They throw the pieces of old paper into great flat and close baskets, washing them in water, and working them with their hands and feet to clean it, and take out all the spots, and reduce it to a perfect mass or consistency. This is then boiled in a cauldron, and the sheets are raised from it, which in this case are of a middling size.

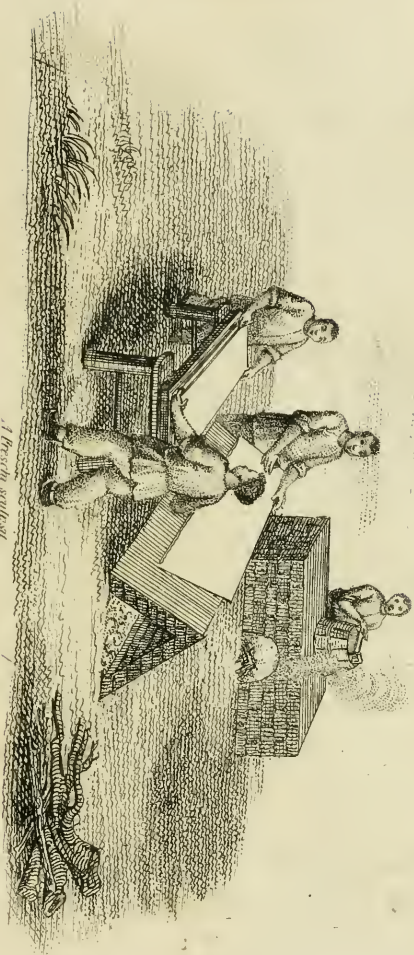
An attempt has been made to introduce the renovation into England, but without much success.

THIRD PROCESS OF PAPER-MAKING.



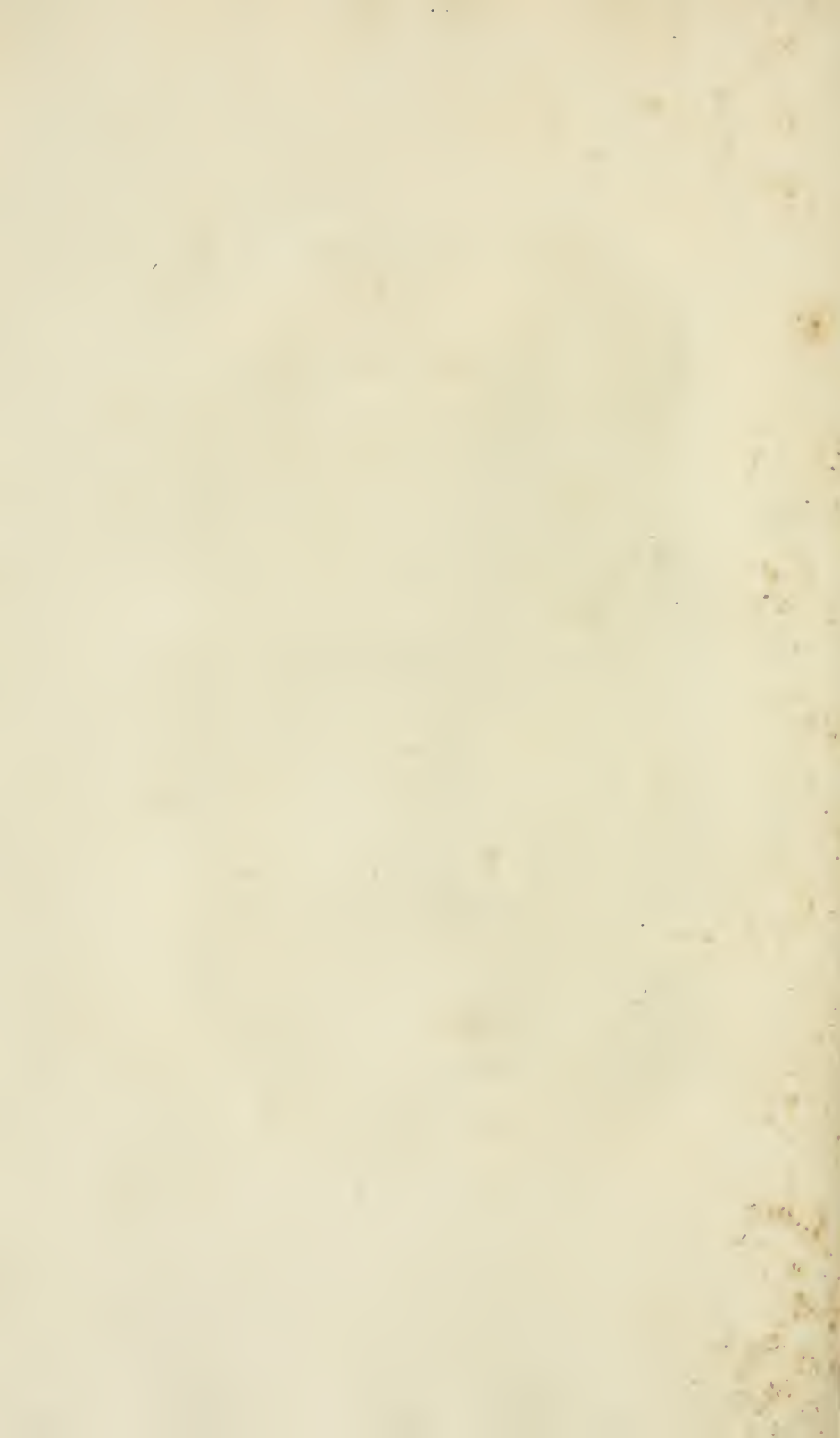
WHEN the bamboo has been softened by the steam of boiling water, and again pounded in the mortar as before, the pulp is boiled in a furnace, and put into several baskets.

The frame or chase, intended for raising the paper in sheets, is not made with iron or brass wire as in Europe, but with fine threads of bamboo: they are small rods which pass several times through a steel wire-drawer, pierced with holes of different sizes; and are made as fine and as tough as iron wire: but they are careful to steep them in boiling oil, that the frame should not admit the water except at the top, and at a depth sufficient to draw out the sheets of paper.



A French mill

PAPER-MAKING Third Party's



The frame is suffered to drain for a few seconds, when the sheet is deposited on a piece of clean stuff without seam. In our European paper-mills, a certain number of these sheets are put into a press for the purpose of squeezing out the wet, and they are then hung on lines to dry; for this process very large rooms are requisite;—that at Auvergne in France is one hundred and forty-four feet long by thirty-six wide, and contains a great number of windows. In China they follow a more expeditious process which requires less space: the sheets are dried on shelves by the heat of a furnace.

When the sheets exceed the ordinary dimensions, the reservoir and frame are proportionately large. The frame is then lowered and raised by cords and pullies.

It is not merely for papering rooms that such large paper is required, but also for the Ti-Tse, or visiting bills. These, which in Europe are only small

cards, are in China of a size proportioned to the rank of him who either gives the invitation, or pays the visit, or by whom it is received. The Ti-Tse, which the emperor orders to be delivered as an honour to the different nobles of his court, or foreign ambassadors, are of rose-coloured paper, and have only one character placed in the centre, signifying supreme happiness. This is one of the most complicated characters in Chinese writing; it consists, among others, of those which designate a cultivated field, house, and children. It is perfectly expressive of what the Chinese reasonably consider true and solid happiness to consist in.

The Chinese manufacture more than two hundred different kinds of paper. That which is for writing on, is prepared with alum. The silver paper is not done with silver but talc. For this purpose they take the talc of the province of Se-Tcheuen, which they emphatically

term Yun-Mou-Che, that is to say, Stone the Mother of Clouds, because every flake which is separated from it, resembles a transparent cloud. The talc is reduced to a fine powder before it can be laid on the paper.

WHEEL FOR WORKING CHINA.

AT the time when, in Europe, the use of earthenware, or, more properly speaking, of the common glazed potter's ware, was unknown, the Chinese were even then manufacturers of that beautiful porcelain which they have never yet surpassed.

The first earthenware was invented in Italy, where the pencils of Julio Romano, and even of Raphael himself, did not disdain to ornament it with their elegant and ingenious compositions: the art was brought to supposed perfection in France, but has subsequently been carried to an almost incredible degree of elegance in England. It was indebted for a very rapid advancement to the learned Bernard Palissy, potter to Henry



A. Freschi sculpsit

CHINA-WHEEL.

Publ.^d May 1812, by U. Stoddard, at Pall Mall

III. of France, and who was celebrated for his paintings on glass. The intercourse which took place with China, first made known its magnificent manufacture. It was wished to imitate it, but the composition was a secret: a thousand absurd stories were invented as to what it was made of; some said it was fabricated from cock's eggs, or the shells of particular fish which had been buried in the ground for twenty, thirty, and even a hundred years. The manufacture of china-ware has been known in that country from time immemorial; its origin is much obscured by fable. A person called Pu is in some respect considered the patron of the china-workers; they have a statue of him in their workshops. His history is as follows:

One of the old emperors, having ordered some pieces of difficult execution, the unfortunate Pu, to whom they were confided, could not accomplish them. In a fit of despair he threw himself into the furnace, and was in an instant consumed

by its flames; the china-work, however, which was baking in the same furnace, came out of it so beautiful, and so conformable to the emperor's model, that the whole was looked upon as miraculous, and the poor workman became a kind of demi-god.

The word Porcelain is unknown to the Chinese, who cannot even pronounce it. It is supposed to come from the Portuguese, who call a cup or dish, pocellana, from the Latin, pocillum, a little cup; though they give to the China porcelain the name of Loça: the Chinese term is Tse-Ki.

Porcelain is so common in China, that, notwithstanding the abundance of ordinary ware, the household utensils are mostly of this valuable material, with which the very roofs of the houses are covered; and, sometimes, columns and walls are incrustated with it.

Near the city of Nankin, which was formerly the capital of all China, is the much-admired china tower; it has eight fronts, each fifteen feet broad; it is two hundred feet high, and is divided into nine stories.

The fine china is as white as snow, and comes from Fo-Kien, or King-Te-Ching. The kind most commonly made is white, with blue flowers. All that which is brought to Canton, for sale to foreigners, is white; it is afterwards ornamented or painted according to the taste of the buyer.

Porcelain is composed of two sorts of earth, one called Pe-tun-Tse, the other Kao-Lin,

The first is argillaceous, soft to the touch, mixed with quartz or rock-crystal and mica. The second is a fusible spath, also mixed with mica and quartz.

These substances, particularly the latter, are found in quarries, in entire rocks. The fragments are broken with iron hammers, and the pieces are then thrown into mortars, where they are reduced to a very fine powder.

This powder is afterwards put into a large jar of water, and is then well stirred with an iron shovel. After this has been discontinued for some moments, a kind of cream rises to the surface, four or five digits thick. This is skimmed off and thrown into another jar of water, which being again stirred, produces another cream, which is removed as before, until nothing remains at the bottom but some large particles, which are taken out to be pounded anew.

The cream, put aside, and dried in square moulds, produces the blocks of Pe-tun-Tse, which are sold in that state as articles of commerce.

These blocks must be reduced to powder, and made into a paste, when intended to be manufactured into china. This paste is worked in the Chinese factories the same as in our own ; in the annexed Plate they are shaping it on the wheel into cups.

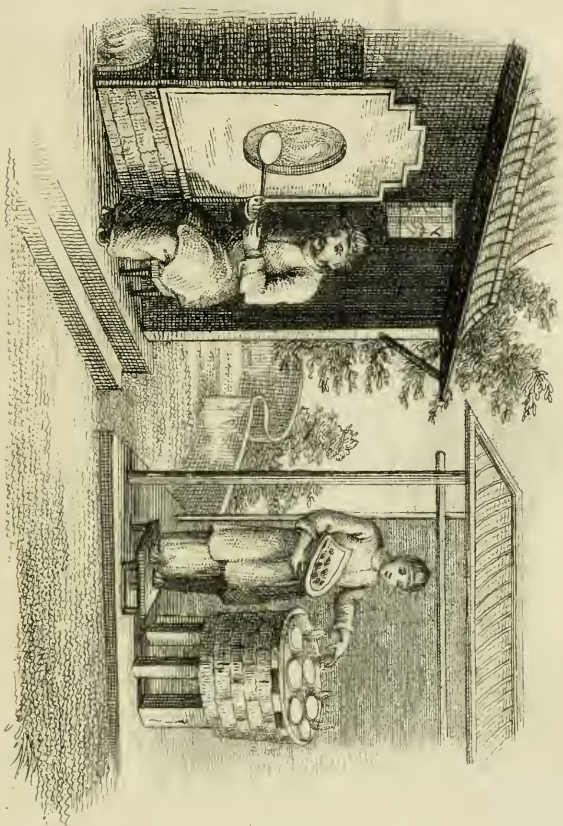
An iron axle, placed vertically in a stone in which the pivot turns, passes across a bench, and carries, at its extremity, a small wooden wheel of about an inch thick, and seven or eight inches in diameter. A similar wheel, also placed horizontally like the former, but three to four feet wide, is raised above the stone, and communicates, to the upper one, the circular motion which the workman, seated before the bench, gives it with his foot.

Such is the European method, but in China it is not the modeller who gives the impulse to the great wheel. A man stands up supporting himself by a cord

fastened to a beam, and moves the wheel by the alternate motion of his feet.

It is on the lesser wheel that all the circular-formed utensils are made. The paste, turning with rapid motion, assumes, under the hands of the modeller, the form of a cup, ewer, &c.; but the oval or square articles, figures of animals, and idols, busts ordered by Europeans, in a word, whatever is not of a circular shape, cannot be made by the wheel. These are cast in moulds: the flowers and other ornaments in relief are applied, on the china, either by being previously formed in the moulds, or by joining the separate pieces with the aid of a little liquid paste.

When the article is completed, and has received its proper polish, it is set in the shade to dry, and thence transferred to an oven, where it remains a considerable time to bake. The fire must be very



A. B. Smith's illustration

CHINA MAKING.

strong, as the paste is subjected to a commencement of vitrification.

The china, after this first operation, receives, in our factories, the improper term of biscuit, which indicates that it has been twice baked, when, in fact, it has only been once in the oven.

The biscuit is of an unpolished white. To make it of a brilliant and almost indestructible gloss, it is plunged, as it comes out of the oven, into quartzous sand and water, which gives it a coat. The vessel is again put into the fire, the coat is vitrified; the paste is finished baking, and, in this state, appears demi-transparent. On this white porcelain are the drawings traced either in gold or in colours, and it is a third time put into the furnace. The fire is not made so strong as for the former processes, lest the colour should be drawn out or disfigured.

In this last particular it is, that the manufacturers of Sevres and of England have left the China porcelain far behind. They now execute porcelain pictures as chaste in design, and as brilliant in colour, as the oil paintings on canvass of the best masters. They have, indeed, an advantage over the latter which is inestimable; their colour cannot change, and may be said to be everlasting.

The art of painting on china has still, of late years, advanced nearer to perfection. The pictures are no longer painted slowly and with great difficulty and expense. The art has been discovered of printing them in black, and in colours, like engravings. The earthenware not requiring a stronger preparation, this operation is easier upon it; and, in France at least, may now be bought for six or eight pence, earthenware plates with landscapes, monuments, figures, &c. so beautifully executed, that, were they



A. Freschi sculpsit

CHINA MANUFACTORY.

Pub. 48 April 1842. by L. Stockdale 41 Pall Mall

painted as before, the price must be exorbitant indeed.

As we have to regret the loss of the art of painting on glass, which was so common in the fifteenth century (it has of late been in a small degree recovered), the Chinese, in like manner, have lost some of the arts which formed part of the manufacture of the old porcelain. The secrets must have died with their possessors.

The old manufacturers painted, in the very body of the paste, figures of fishes and other animals, which only became visible to the eye when the vase was filled with liquid. In other respects, the preference shewn for the antique porcelain of China and Japan is often ridiculous. The Chinese sometimes take advantage of the mania of European merchants. They imitate the composition and form of the antique china, which they bury for a month or so, in the

dirtiest soil which they can select ; and the outside is, consequently, so much corroded that the vases sometimes pass off as three or four hundred years old.

This imposition on the part of the Chinese is not to be wondered at, as they are the most barefaced cheats on the face of the earth, in their dealings with Europeans. The servants pick out of the tea-pots, the leaves of tea which have already been used, to dry them again, and sell them to the merchants, who put them in, to increase the size of the bales of tea, which they forward to Canton. In boxes of hams it rarely happens that some of them are not pieces of wood shaped and painted like hams. Pepper, although very cheap with them, they adulterate with false peppercorns made of paste and rolled in pepper-dust ; and in this way they practise deception with almost every article of commerce.



A. Fresh's sculpsit

MONKEYS GATHERING TEA.

Pub. 25 April 1812 by W. Stockdale, 4 Pall Mall

MONKEYS GATHERING TEA.



IN England, porcelain is termed China, or China-ware, as though it were the prime merchandise of China, which indeed it might be in the opinion of those who so designated it, when it was first introduced into Europe. Tea, however, is a no less famous production of that country, although it was so long unknown in Europe, to which it was not imported by the Dutch until the early part of the seventeenth century.

Little would it be supposed that, at that very period, the Chinese used, as a substitute for their favourite beverage, the infusion of an European plant. The Dutch gave them in exchange for tea, small sage, which is well known to be

very aromatic, and the decoction of which makes a pleasant drink. Unfortunately, however, for the Dutch speculators, this fashion, which they introduced at Canton, was not of long duration, nor did it go beyond the city.

The tea-tree is found in some of the provinces of China exclusively of every other country in the world. The attempts which have been made to introduce it, even into Hindostan, do not seem to have been followed by any success.

The plant which produces tea has been classed by Jussieu, in the family of malvows. It has a rose-like blossom, composed of six or nine petals, the three of which are smaller. The fruit is a pod, not very unlike that of the nasturtium, but it seems to be made no use of. The leaves of the plant are the only parts of it which are deemed worth the trouble of gathering.

The tea-tree grows in the hottest provinces. It is not, in China, an object of luxury, but of necessity. It is taken without sugar or milk, and is considered requisite to correct the crudities from the generally bad water of the country. The kind of food which these people live upon, in common, is hard of digestion, which they stand in need of tea to promote.

The real Chinese name of the plant is Tcha; the word Tea, however, is not of European invention—in some of the provinces the name of the plant is so pronounced.

The Chinese enumerate four particular species of it—the Song-Lo, Vou-Y, Pou-Yul, and Lo-Ngan. Europeans particularly esteem the first kind, which they call green-tea; the rest is all confounded under the denomination of black-tea.

The method of cultivating tea varies in different districts. In the province of Kiang-Nan, they prevent its growth beyond six or seven feet: elsewhere it is suffered to grow to the height of ten or twelve feet. It is susceptible of a much taller growth, but they lop off its top, and cultivate it as a bush like the rose-tree.

The plant is sown in the month of March, and the young plants are transplanted at the distance of three or four feet from each other. The leaves may be gathered from them at the end of the third year, but care must be taken to renew the plants every five or six years; for unless that is done, the leaves become hard and bitter. The leaves are gathered at the beginning, middle, and end of spring; the autumnal, or second sprouts, are considered less delicate, but they are in greater plenty. The colour of the leaves depends on the time of their being gathered; they are of a bright green at

the beginning of the spring, they then become of a dull green, and afterwards of a dark green approaching to black.

Morning is the time for picking off the tender leaves, when they are covered with dew, before the sun is up. As soon as they are gathered they are exposed in a vapour-bath; they are then rolled on iron plates or tiles, and are dried in the sun.

The best tea is that, the leaves of which have been rolled singly between the fingers of women, whose business it is. That rolled by the hand is called Tchu-Tcha.

Various ingredients are sometimes mixed with the tea, rather to increase its bulk and to adulterate, than to improve its quality. Such are the blossom of the Lien-Whoa, or Indian Nenuphar, and the Camelia-Se-Sanqua, the flower of which

has a very close resemblance to that of the tea.

The dried leaves are inclosed in large boxes lined with sheet-lead. The Chinese peasants tread the tea with their naked feet, as the French wine-pressers frequently do the produce of the vintage.

The imperial tea, called Mao-Tcha, is composed of new leaves, gathered from the young plants of the Vou-y-Tcha (bolica-tea). This production is not an article of commerce; the emperor makes presents of it to his principal courtiers, through whom it may pass to others, and even to Europe.

High and dry places are better adapted for the cultivation of the tea-tree than low and damp ground; the consequence is, that it is frequently very difficult to gather; particularly the best kind of it. Men could not keep their hold without great difficulty on perpendicular hills,

where the least slip would subject them to serious wounds, and, at any rate, to shake and tear up the young trees. The situations are sometimes so steep that men could not even get up to them.

A very singular expedient has been resorted to for gathering the tea in places so difficult of access; it is the subject of the annexed Plate, the original of which was transmitted by the missionaries.

Monkeys are trained to climb these heights, and to strip the leaves from the bushes. The leaves either roll of themselves, or are driven by the wind, from the top to the lower part of the mountain, where the proprietors of the plantation gather them.

It may be imagined that these kinds of assistants are not the most easy to be procured; for the monkeys, in this employment, cannot be guided wholly by artificial instinct. The tea-berries have

no attraction for them; and indeed if they had, they could only be used for the autumnal harvest. The fruit of the tea is not only bitter, but somewhat corrosive. The monkeys follow no other impulse than that which they derive from an able instructor. When they come down from the mountain, which they have climbed by means of cords, they are rewarded by something which they are particularly fond of.

Thus it is that man turns the instinct and industry of the animal creation to his own advantage. We train the falcon, dogs, and even in India, leopards, for the chase; and the Chinese, as will be seen in a subsequent volume, make use of the voracity of the cormorant to procure, from the very depths of lakes and rivers, that fish, which in vain defies both the hook and net.

The English have not the same reason as the Chinese for the use of tea. Coffee

and strong liquors are more active stimulants to promote digestion than tea; but with them, tea-drinking is a kind of mania: certainly not from medicinal motives, but rather perhaps as a cheap meal, at which a mixed, and generally a lively society is accustomed to assemble. Physicians pretend that this beverage has rendered cutaneous diseases less prevalent than heretofore.

The annual importation of tea into England is prodigious. A century ago, it did not amount to fifty pounds weight a year; in 1777, it was six millions; and in 1795, nearly twenty-eight millions. It is true indeed, that the British do not buy this quantity wholly for their own consumption, but to export to other countries.

In Father Amyot's Memoirs is the confirmation of a fact, which was thought questionable in Lord Macartney's account;

namely, that the tea which came to Europe had a perfume and strength which was not discoverable in China.

Nearly the same thing occurs, however, with the Bourdeaux and Madeira wine, which become far more generous when they have been a long voyage.

Tea is much dearer in the provinces where it is grown, but in Pekin its price is exorbitant. The price at Canton, to the English East India Company, is about eight-pence a pound; that of a superior quality not quite three shillings. There are many public-houses for tea, where the lower orders can get a cup of very inferior tea for two tsen, which is the fraction of a farthing.

Tea is always set before visitors in China, whatever time of the day it may be. It is served up in china cups with covers. It is never drunk cold; and, as

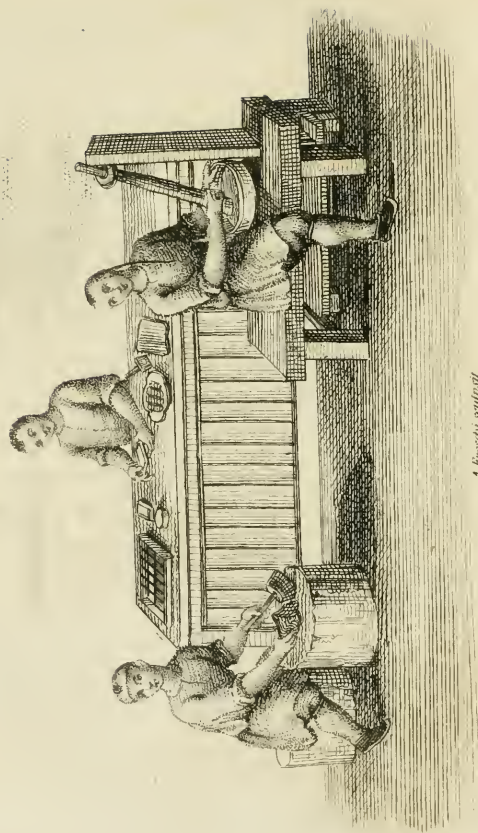
has been already mentioned, the Chinese neither add cream nor sugar to it.

They make the Pou-Yul tea into balls; it is so called from the village which produces it, in the province of Yü-Nan; these balls are forced to be cut to pieces before the water is put to them. The tea from them is not pleasant to the palate, but great medicinal virtues are attributed to it.

In the streets of Peking, and of the other great cities of China, are itinerant tea-dealers. They sell it by the cup, ready made, for a small price. It is scarcely necessary to observe, that the tea is of but a very middling quality, which bears a proportion to the low price they require for it.

They have another curious method, which the missionaries communicated, of making the Hiuen-Tcha, or imperial tea,

into balls. Some Chinese bleed live horses, and save the blood in buckets to mix with the leaves of tea. The drawing which described this process being unaccompanied by written detail, was therefore withheld.



A Pressing outfit

INDIAN INK.

INK-MAKING.



THE invention of paper would have been of little moment, if the Chinese had not discovered also a kind of ink adapted to writing upon it.

The China, or Indian ink, is composed of lamp-black, which is made by burning pine-wood, hogs-fat, and oil, the smell of which is corrected by a mixture of perfume, and particularly of musk. From this composition is made a paste, by mixing it with the glue of ass's skin, and the paste is put into wooden moulds of different sizes, to give it the form desired; they are ornamented with figures of men, dragons, birds, trees, flowers, &c. They are most commonly in square or oblong square sticks, on which are inscribed Chinese characters.

The best ink comes from Nankin ; but the other manufacturers counterfeit its marks, as our manufacturers substitute Indian-ink of their own making, for the real manufacture of China.

The old ink is said to possess salutary medicinal properties, particularly in disorders of the stomach, and spitting of blood. This favourable effect is wholly produced by the glue from the ass's skin.

The Chinese use, for writing, a small table of polished marble, with a hole at one extremity to contain water ; they dip their stick of ink into it, and rub it more or less, according to the degree of blackness which they wish to give to their writing.

The marble slab, brush, paper, and ink, are called Pau-Tse, words which signify the *four precious things*. Our students, clerks, and even our men of

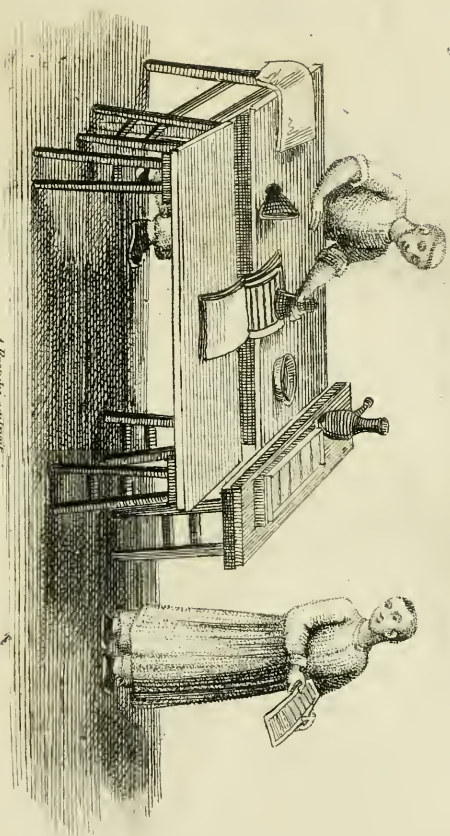
letters, whose inkstands are often disgustingly filthy, would blush for shame at the particular neatness and cleanliness with which all the Chinese writers keep the materials which they use in writing.

CHINESE METHOD OF PRINTING.



THE art of printing, which may be said to have been invented in Europe only about the middle of the fifteenth century, long subsequent to the fine literary ages of Greece and Rome, is carried back, in China, to the earliest date of antiquity: the most moderate calculations reckon its discovery about fifty years before the Christian era. It is true, however, that the Chinese are not such proficient in this respect, as we are; they have no movable types, except for the running titles of their gazettes, calendars, and some other works where the same forms are often repeated.

Their method of printing consists of engraving, in relief, on a block of wood,



PRINTING.

the discourse, or work, of which they want a number of copies.

The manuscript is then transcribed by a good writer, on fine transparent paper; and the engraver places each sheet, with the writing downwards, on a plank of apple, pear, or some other hard wood, on which the characters are cut, grooving out the intervals.

In business which requires dispatch, as an edict, a declaration, &c. the engraving is made on a piece of yellow wax. This method of printing is, as may be supposed, the most correct which can possibly be found; it is not subject to the error, repetition, omission, or transposition, of words or letters when once made accurately. If, however, there are any mistakes, or the plate requires alteration, the defective part is cut out with the point of the cutter, and another piece of wood is let into the place.

It would not be practicable to adopt the same method in Europe. The stereotype printing, however, approximates it closely in all its advantages, but is much more perfect in its operation. The Chinese method is this: after fixing the board even, they dip into the ink a brush, with which they rub it over, from one end to the other; they then apply a sheet of paper, and pass another soft and oblong brush over it, for the purpose of bringing out the characters.

The printing ink is made with soot, steeped in brandy, and strong and somewhat fluid glue.

Every printed work bears, not only the name, but the seal of the author; the seal is of agate, coral, jasper, or rock-crystal: the impression is made with a red oil colour.

The characters of the seals are in old writing; they contain the person's name, and some sentiment or device.

There are no literary gazettes in China, which publish an account of new works; the journals seldom speak of any thing but pretended astrological observations; some articles are devoted to political occurrences. The missionaries have asserted, that immediate death would be the consequence of a falsehood in the Imperial Gazette of Pekin; Mr. Barrow, however, notices, that they frequently exaggerate military events, and sometimes announce victories which have never been gained. The missionaries expressed themselves inaccurately; they only meant that the editor would be punished if he presumed, of his own accord, to insert any thing which was not officially transmitted to him by government.

I shall add to what I have before stated on the subject of the Chinese binding, that, compared with ours, it presents the singular difference or contrast of the principal margin of every page being at the top instead of the bottom:

the running title is at the left outer margin of the left-hand page, and is written from top to bottom, in the Chinese manner. The numbers of the pages are a little lower, on the same margin, nearly three quarters of its length down: beneath the folio is a black line, perpendicular to the frame of the page, and communicating from the first page of one leaf to the back of the other. These lines, in the Chinese books, are the same as the two punctures in the middle of the sheets of European books; they keep them on the press, in proper register. This is the reason why, on every Chinese leaf, is a black line close to the edge.



A. Freschi sculpit

COLLECTING VARNISH.

Pub. 4th April 1812. by L.L. Stockdale 41 Pall Mall

GATHERING VARNISH.



THE tree which produces the Chinese varnish, is a species of sumach, but is not the same as the Japanese varnish. The latter, *Rhus succedaneum*, or *Rhus vernix*, is cultivated in Europe, and its wood is more esteemed by the joiner and cabinet-maker than that of the walnut-tree, and is more durable than oak.

As to the varnish-tree, we have neither hitherto succeeded in importing the plant, nor in making the experiment of bringing it into cultivation. Lord Macartney's suite, when it was in the southern provinces of the empire, purchased, at very exorbitant prices, and with great difficulty, several of the varnish-plants; those who procured them professing great apprehension of discovery: but what was

the surprise of the purchasers, to find them all droop and wither away ! On looking into the cause of their failure, they found that not one of them had a root; they were mere small branches stuck into pots.

The varnish, which the Chinese denominate Tsy, is a reddish gum, which runs from a tree, the foliage and bark of which are not unlike those of the ash-tree : it is about fifteen feet high, and two feet and a half thick.

The tree must be of seven or eight years growth before the juice is extracted ; and the only season for obtaining it is the summer. Several incisions are made in the trunk lengthways, with a small semicircular knife : the man who makes the incision with one hand, has, in the other, a shell, which he introduces immediately as far as he can into the opening, that is to say, about half an inch, which gives it sufficient hold to remain without

other support. These incisions are made in the evening, and they go the next day, to collect what has oozed into the shells: they frequently, instead of shells, apply long tubes of bamboo to the incisions.

The varnish is not generally extracted from the trees by the proprietors themselves, but by merchants who engage them from the proprietors, at two-pence halfpenny per foot, for the season.

Some precaution is requisite to protect the workmen against the pernicious effects of the varnish: their custom is to rub their hands and face with a particular kind of oil, for the purpose of neutralizing it. When they have done working, they wash themselves all over with hot water, in which have been infused fir-bark, chesnut-husks, saltpetre, &c.

While the people are at work about the trees, they put their heads into a linen bag, which they tie round their

necks, only leaving two holes for the eyes: they wear also a kind of apron of deer-skin, with boots and gloves of the same.

The process, which consists in extracting the varnish with bamboo pipes, as in the annexed Plate, is less dangerous, because the varnish is contained in the compass of the bamboo, without emitting a great external evaporation; in the engraving one of the workmen appears resting from his employment, and eating his rice unconcernedly at the foot of the tree.

The shells or bamboos into which the varnish runs are emptied into a strainer of fine cloth, over a great earthen jar: what cannot go through it is kept separate, and sold to the druggists. It is reckoned a good harvest when they obtain twenty pounds of matter from a thousand trees, in one night.

When the whole is completed, the merchant deposits his varnish in wooden pots, closely shut.

The workmen who neglect taking precautions, are subject to a dreadful malady, which they term varnish-boils; a kind of tetter, or ringworm, breaks out all over them, which is removed only by strong purgatives, fumigations, &c.

The Chinese varnish, besides the brilliancy it imparts to the most trivial works in wood or card, to which it is applied, has the further property of preserving the wood, and preventing the effects of damp on it, being impervious to water.

The varnish may be used, either directly on the wood, or on a niastich, prepared with paper, flax, and lime, well worked together. Such is the transparency of the varnish, that two or three coats of it do not prevent every vein in

the wood being seen. If it is wished to conceal the surface worked upon, the number of coats is increased. When the work is dry, it is painted in gold or silver with various figures, on which again another coat of varnish is laid, to give them greater brilliancy, and retain them in more perfect preservation.

The Japanese varnishes are preferred as articles of commerce, because they are prepared with greater care and more taste.

Japanned works are commonly black : those of another tint are not so fine, because the drugs which are obliged to be mixed with them, produce a dull colour.

The varnish or japan which our workmen use on wood or iron has no similarity to that of China ; the japan, especially on iron, is applied by means of a strong fire, which the Chinese varnish could not bear. The Chinese and Japanese cabi-

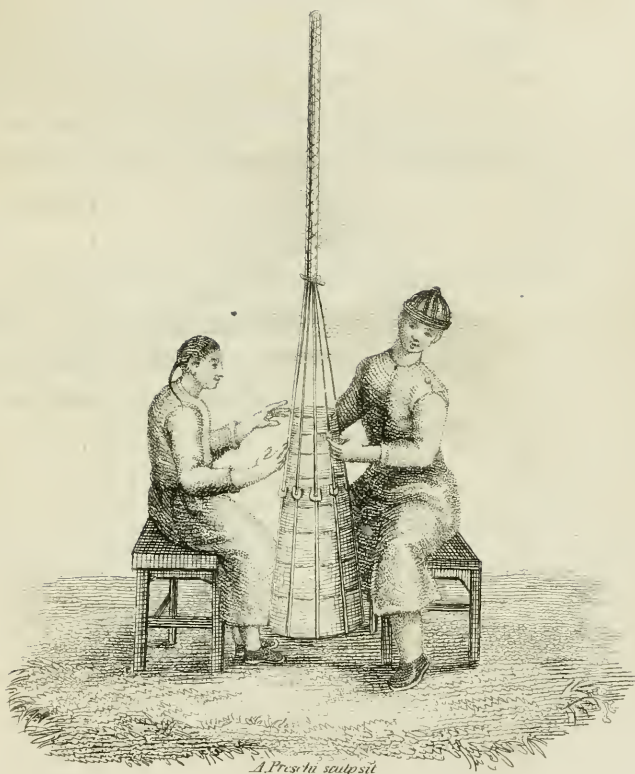
nets were formerly very much in request, but they are now out of fashion. Such, however, is their beauty, that there is little doubt they will soon be in fashion again

SILK-TWIST. MANUFACTURERS.

THE Chinese method of breeding silk-worms, and preparing the materials furnished by those laborious insects, will be given in detail in the fourth volume.

The figures represented in the annexed Plate are engaged in manufacturing silk-twist by a very different mode to that adopted by Europeans. Their machinery is not horizontal, but vertical. The threads are extended round a truncated cone.

The females who twist cotton roll the threads very adroitly on a curved tile, which is placed on their knees, with the convex side uppermost.



SILK CORD MAKERS.

Pub. 4th April 1819 by LI. Stockdale 41 Pall Mall

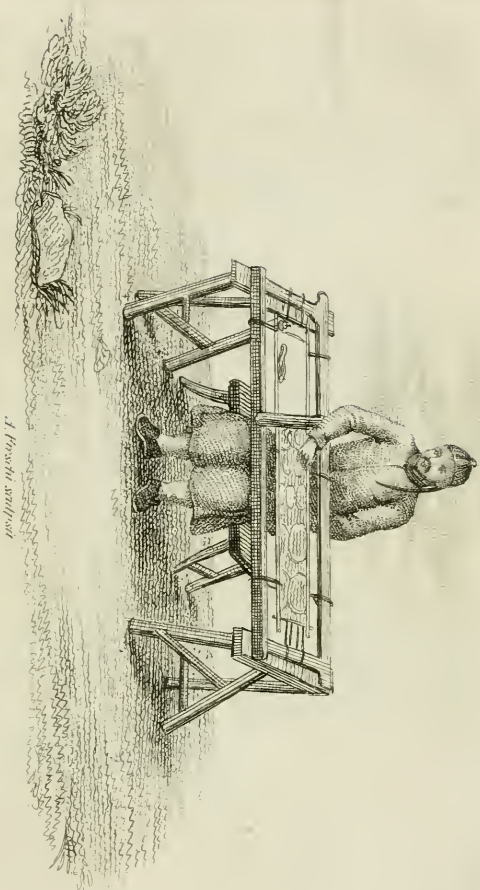
The industry natural to the Chinese induces those who, from age or sex, are not strong, still to employ themselves in useful occupation. In this way the old men make a return for the cares which the younger and more robust members of the family take for them, and for the honour which they shew them by always giving them the most distinguished place.

Silk-twist is, among other things, used in the binding of books; and silk-cord is used to strangle the criminals who are condemned to undergo that punishment.

EMBROIDERY.

THE frame used in embroidery is made of bamboo, and is not very unlike that used in Europe. The females who follow this employment, do not sit on chairs, but on large china or common ware jars.

The Chinese embroidery is very far from bearing any comparison, for delicacy and chasteness of design, with that of Europe, but it is distinguished by a merit peculiar to itself. They have a method of embroidering in relieve on satin, silk, and velvet, of making flowers and fanciful figures, with mixed and separate threads, and of distinct kinds of work, and often sewing them upon whatever is to be the groundwork.



A. Smith and Co.

AN EMBROIDERER,

Printed and sold by T. Smith, at the North

The embroiderer herein represented, is at work on two pieces of silk cloth ; one for a civil mandarin, which is distinguished by the figure of a bird ; the other for a military mandarin, on which is that of a quadruped.

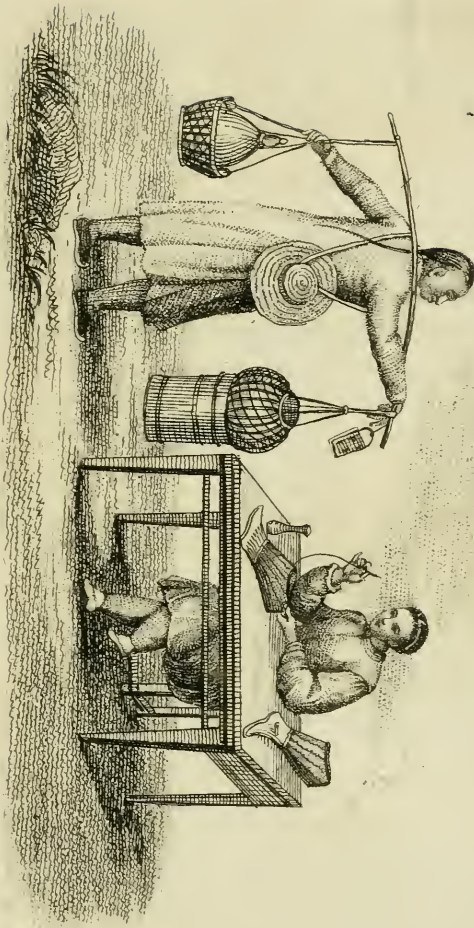
If the Chinese and Indians do not bear away the palm from our manufacturers in the art of embroidery, they frequently excel them in that of working gold cloths, where the flowers and ornaments are manufactured at the same time with the piece. The Cashmire shawls, worked in a country tributary to Persia, are not only incomparable for the fineness and softness of the wool, but for their brilliancy of colour and the durability of their fancy ornaments.

A STOCKING-MANUFACTURER, AND A
VIPER-SELLER.

THE stockings of the Chinese are not woven, but made of sewed cloth, lined with cotton, and a gold thread at the top. If these stockings are not elegantly shaped, they, at any rate, possess the advantage of being very warm.

In Europe, the trades of hatter and hosier are generally one; but, in China, they are of quite an opposite description.

The Chinese hats, at least those used by the higher classes, are made of a tissue of very fine cane; it is covered with fine light hair, taken from the belly of a particular species of cow; it is coloured



1. First step

VIPER-SELLER.

STOCKING-MAKER.

of a bright red. In court or family mourning dresses, it is customary to take off the red tuft from the hat, for twenty-seven days.

The other figure in the same Plate is that of a dealer in vipers. He carries over his shoulders a piece of bamboo, to which is suspended, on one side, a basket, and on the other a wooden bucket: in the basket is an earthen jar full of snakes made into broth; the pail is surmounted by a kind of cage, in which are live vipers or snakes.

There are several kinds of serpents which the Chinese make use of, either medicinally or as food. These reptiles are daily exposed for sale in baskets, kegs, or earthen pots.

The board which the dealer has in his hand, and on which are inscribed some Chinese characters, contains a recommendation of what he has to sell. The

shopkeepers have similar tablets, whereon are written, in an emphatical style, the merits of the articles in which they deal; they generally conclude with the words Pou-hou, or, He will not cheat you.

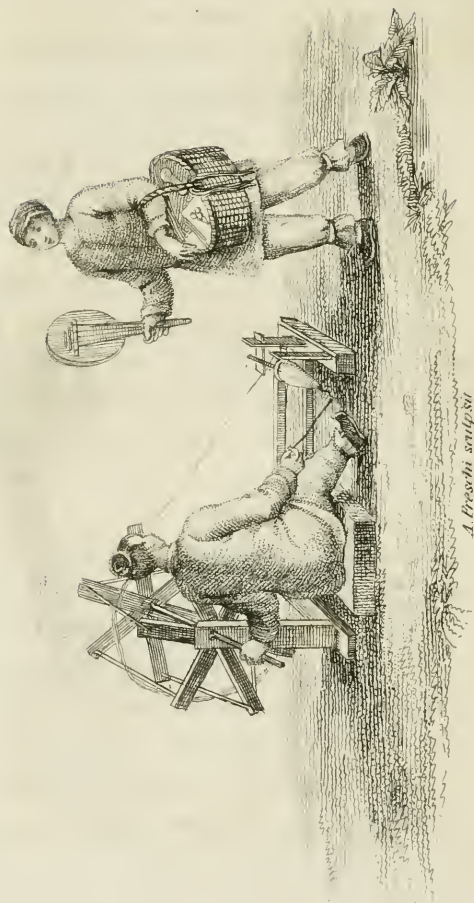
The men whose business it is to catch the snakes, manage it with equal ingenuity and courage. When they have discovered one of these reptiles asleep, they glide their hand gently along its body, not to disturb it, and, when they come to the back part of the head, suddenly press it down, so as at the same time to prevent the animal either from getting away, or from biting. They immediately draw out the venomous fangs and vesicles, and put the serpent into a small basket which they have for the purpose at a girdle.

It is a vulgar and unfounded opinion that serpents wound with a sting. It is no such thing; what is mistaken for the

sting is their tongue, which they move with such volubility that it appears double. The poison is contained in two vesicles, each placed under a hollow and crooked tooth. When the animal makes a bite the vesicles are compressed; the fangs, which are extremely sharp, strike into the flesh, and the poison being expressed enters the wound and makes it very dangerous, and even mortal, if prompt relief be not administered. The vesicles and fangs once drawn, the animal is no longer formidable: the other teeth are very small and obtuse, and make scarcely any impression on the fingers.

It is not uncommon in India, to see a quack with a long viper twisted round his neck without doing him the least harm. The people, who see the reptile shake his pretended sting (that is, his tongue) with great velocity, feel great alarm at the sight, but there is not the least danger.

Some of these exhibitors of snakes are said to swallow, almost entirely, one of these live serpents, and, to convince the spectator that it is no deception, let him draw it out by the tail.



COTTON SPINNER. MANTA MAKER.

A THREAD-SPINNER, AND A MANTUA-
MAKER.

THIS Plate requires little explanation. The thread-makers of China do not merely spin, like ours, flax and hemp, but cotton. It should be observed, on this subject, that, in India, where the manufacture of muslins and cottons has been carried to the highest pitch of perfection, the machinery in use will not for a moment stand in competition with the ingenious mechanism of England. The cotton is not spun by that complicated machinery, by the aid of which, a single workman can put a hundred bobbins in motion; all is done by the wheel or the distaff. The consequence is, that the thread is much finer and more equal.

The object of the European machinery is to diminish the expense of manual labour. In India and China, where the population is so numerous, and the means of subsistence so easy, and it costs scarcely any thing to keep a man, workmen of every description may be had very cheap. Suppose a journeyman to cost two-pence a day, thirty might be had for five shillings, which in England would only hire one.

The Chinese mantua-makers are less splendidly circumstanced than most of the lady dress-makers in either England or France; but their lot is more equal, and their apprenticeship easier.

Almost the whole of them are forced to go about the streets, with a basket containing their professional utensils on their arm, and in this way they walk up and down until some one who has occasion for them calls them in.

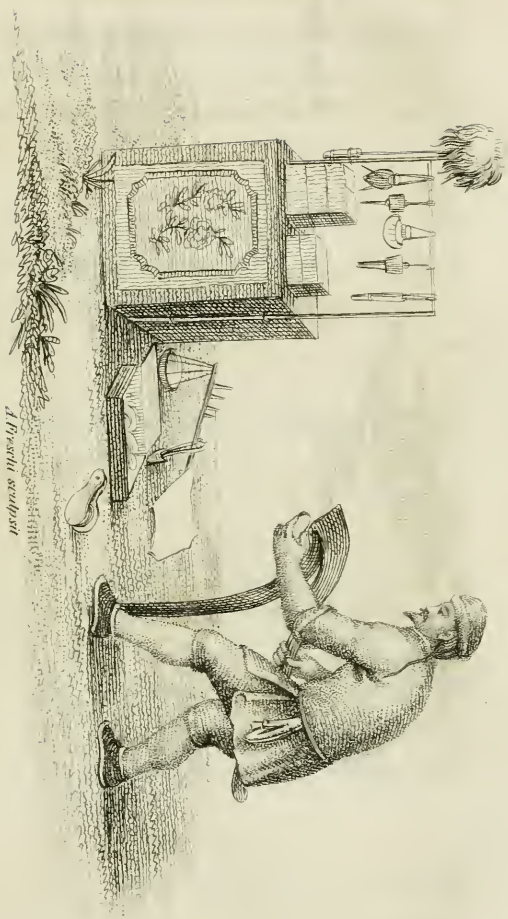
The fashions are not liable to change. The drawings of the costume transmitted by the missionaries in the time of Louis XIV. are perfectly applicable, in shape and colour, to those of the present day. How different amongst the Europeans! The dress of the present year is not only unlike that of the last, but perhaps as different from it as those of twenty years before were, to the fashions of the century preceding. But we not only change the fashions, but the terms, or rather the jargon of them.

A MONEY-CHANGER CUTTING INGOTS
OF SILVER.

THERE are but two metals, silver and copper, which are current in China, as the representative signs of commercial values.

Gold is regarded merely as a valuable material, the intrinsic worth of which is susceptible of the fluctuation of commerce. Its price, relatively to silver, is less than in Europe; so that the merchants who bring to Canton ingots of silver to exchange for ingots of gold, make considerable profit by the transaction.

Gold would be still more common in the Chinese empire, if the government permitted the mines which are said to abound there, to be worked. That which



A. P. Smith sculptor

WOMEN'S CHANGERS,

Pub. 4/63, April 1863, by A. A. Montague, at Fall Nook

is spread throughout the country is either derived from foreign commerce, or from the native gold which is collected in the sand of rivers.

Silver is not coined into money: it is cast into cakes or ingots of different sizes, which are cut for the purposes of payments.

The Chinese weigh the ingots in small portable scales enclosed in a japan case; they are not unlike the Roman balance; being composed of a plate, an ivory or ebony lever, and a moveable weight. The beam, divided into very small parts, on three of its sides, is suspended by silk threads in three different points, so as to weigh any quantity. These scales are said to be exact to the thousandth part of a crown.

The silver should uniformly contain an hundredth part of alloy; but some is lowered still beyond this, which, when

discovered, is not taken as payment. The Chinese are so much in the practice of ascertaining its quality, that they tell the value of the ingots at a single glance, and are scarcely ever deceived.

They are so much in the habit of cutting the silver ingots to facilitate the settlement of their accounts, that they also cut the Spanish piastres (that is, the money with which Europeans make their payments at Canton) with the same nicety.

These Spanish piastres are inscribed by the Chinese with particular characters to indicate that they are good. They also drill holes for stringing them. The Chinese in the provinces do not like the marked or chipped piastres, which they exchange for new, giving two to four per cent. in addition.

This method is subject to the inconvenience of losing certain portions of the metals; consequently some of the lowest

orders make it their business to collect and wash the refuse which is swept from the shops into the street, for the chance of finding the shavings made in cutting the ingots: an occupation which may be as profitable as that of the channel-scrapers in London, who thus collect horse-shoe nails.

Properly speaking, there is no money but copper money in China, which alone is of a fixed and stamped value: it is cast and not struck. This is an expensive method, says M. de Guignes; but government being in possession of the copper-mines, is not under the necessity of purchasing the metal which forms the coin, and consequently indemnifies itself, without difficulty, for the cost of manufacturing it.

The old coins are very rarely met with in China: the pretended collections which the Chinese sell to foreign amateurs are frequently intermixed with

counterfeits, which are the less liable to be distinguished from the genuine, as they are cast in a mould. The sagacity of our antiquaries, who recognise by a grain of sand, or the slightest mark, that a medal has not been struck, but cast, is therefore of no avail in making the distinction.

The only tolerably well ascertained fact as to the time when coins were first circulated in China, is, that Tching-Tang, the founder of the second dynasty, seventeen or eighteen hundred years before Christ, worked a copper-mine, and manufactured some pieces of coin to facilitate the exchange in purchasing provisions, of which the people, who had long suffered from famine, stood in the greatest need.

The metal of the copper money is brittle; it is composed of equal parts of *toutenague*, and white and red copper, the two first of which are metals peculiar to

China. Their mode of reckoning is by the *leang*, *tsien*, and *fen*, or, to make use of Portuguese phrases, by *taëls*, *mas*, and *condorins*. Each *mas* contains from eighty to one hundred coppers according to the currency: they are connected by a ring which is run through each copper and fastened at the top. The more readily to pile the farthings, the changers have bits of hollow wood in which they arrange the number they want.

Every one who counterfeits money forfeits his life, which however does not prevent this crime from being very prevalent. Base money would be in still greater quantities if the coin were of silver; for the counterfeiting of copper coin does not hold out any very material advantage. The most ordinary mode of deception is by hammering out and enlarging the small old prohibited coins to the size of the current farthings; and these, being strung with good ones, are

not easily detected without separating the rouleau, and examining them all singly.

China has had tin, lead, iron, earthenware, shell, and even paper money.

After the reign of Han, a prince is said to have taken it into his head to suppress all the copper money, and replace it with round pieces of terra-sigillata. This is a species of clay to which, in the East, are attributed miraculous properties: it is so called from the Latin Sigillum, a seal, on account of the pieces which are used in commerce, being stamped with an impression. The most advantageous use of the terra-sigillata is to make it into jugs, the water put into which refreshes itself spontaneously: from the material being so porous, a sensible evaporation takes place through it, and the warmth is consequently diminished. The prince in question got together all the copper money he could

find, buried it in the ground, and put the workmen whom he employed to bury it to death, so as to conceal all knowledge of it: a precaution as execrable as ineffectual.

The cowries, or shells of India, which are used as currency there, were formerly current in China, where they were called *poei*. It is long since the use of them was discontinued.

All the present coins of China are round, with a square hole, and strung, as has already been mentioned, in tens or hundreds. Under the early dynasties, some of them were very whimsically formed; one was in the shape of a cutlass, and therefore termed *Tao*, which means cutlass; another like the shell of a tortoise, and others like clocks. One kind was called goose-eye, and which were so thin that they floated on the water; ten thousand of them were necessary for the purchase of a measure of

rice sufficient to last a man for ten days.

The people are very careful of some of these old coins, on account of the mysterious figures impressed upon them; such are the Fong-Hoang, or the Chinese phoenix, and the Kilin, a fabulous animal of which they tell all sorts of wonders. The Kilin is in shape like an ox, with the scales of a fish, a horn in the centre of his forehead, and whiskers at each side of its throat.

The paper money which was current at the commencement of the King dynasty, consisted of a leaf sealed with the imperial seal, and worth an ounce of silver; beneath it was an inscription, analogous to that which was inserted in the assignats of revolutionary France: *The law punishes the forger with death—the nation rewards the informer:* so that the fabricator himself transcribed his own sentence; he could not but tremble,

though it might not interrupt his horrible speculation.

Like as the curious in France amuse themselves with papering their studies with assignats which they had collected at the period of their greatest depreciation, the Chinese are very tenacious of preserving their paper money. The difference however is, that they are not actuated by curiosity, but by superstition. Those who are building, fasten one of these notes to the main beam of the house, from a conviction that this species of talisman will preserve their families from every kind of misfortune.

The Chinese coins never carry the likeness of the prince, but his name and dynasty, the year of his reign, &c. They are little known in Europe, as, on account of their diminutiveness, clumsiness, and trivial intrinsic value, they would not be very ornamental in the cabinet of an amateur.

An antiquary of considerable ability, author of much-esteemed researches on the monumental antiquities of Ireland, *Collectanea Hibernica*, fell into a most whimsical mistake on the subject of a Chinese farthing which was not very old, as it was of the reign of Kien-Long.

This coin, which there is little doubt had found its way to Ireland in a bale of merchandise, had served as a plaything for some children, who threw it into a bog, where it was afterwards discovered, and eagerly carried to our sagacious General. The rust and verdigrise with which it was incrustated at once conveyed the idea of its remote antiquity. He mistook the four Chinese characters for Syriac, and the Mantchou-Tartar inscription on the reverse for the ancient Phenician. After arduous investigation, he fancied he could discover in the half-obliterated characters, the Phenician word *pour*, *Anglicè*, fate or destiny. He accordingly had no hesitation in pro-

nouncing that this coin had been brought to Ireland, or struck in Ireland, by the Phenicians; and he published a long dissertation on the subject, concluding that it must either have been brought by the Phenicians, or struck in the island; and that alone was a more irrefragable proof of the authenticity of the ancient history of Ireland than all the volumes which had been written on the subject.

CHINESE COUNTRY STAGE-CART.

ALTHOUGH this conveyance is used for the carriage of the most common articles, it differs little in form from those which the richest Chinese, and even the emperor himself, make use of for riding about the streets of the capital, and for travelling. From the awkward form of these carriages, palanquins and litters might well be thought far preferable.

The country stage-waggon or carts are narrow, heavy, on small wheels without spokes, or rather with four clumsy blocks as a substitute. The weight is placed over the wheels, and partly outside; consequently, the centre of gravity not being in the middle, the vehicle is liable to be overturned by the least jolt.

The villages in some provinces make use of bamboo wheelbarrows, very difficult to hold and guide. M. de Guignes says that, "having met an empty barrow, we endeavoured to wheel it, but it was not without difficulty that we could maintain its equilibrium; whence an opinion may be formed of the labour of the conductor when it is laden, with the addition also of a sail."

The ancient travellers all speak of these carriages with sails, as more common with the Chinese of that time than with their descendants.

These barrows are made of bamboo, and have only one wheel. When there is no wind, a man harnesses himself to it, and draws it before, while another keeps it steady, and pushes it behind. When the wind is favourable, they spread a mat sail, which makes the labour of the man who draws it unnecessary.

After all, however, this plan is more practicable in some countries of China than it would be in Europe. In those regions, the monsoons, or equinoctial winds, blow regularly in one direction.

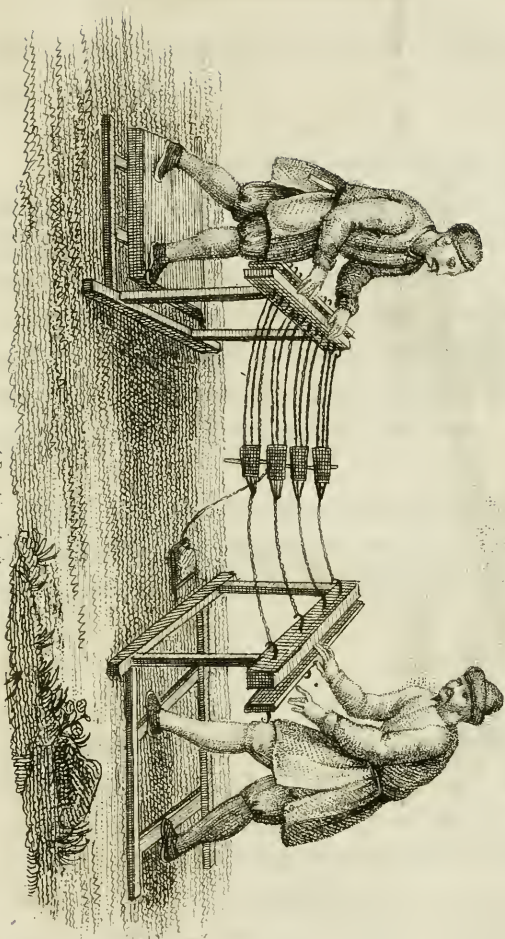
M. de Guignes remarks on the sailbarrows of China, that "all this machinery is of very little, or rather of no use whatever." However, the Chinese peasant has only to set his sail, and push his barrow in the common way: if he acts otherwise, he must find some evident advantage in it. It is not in such things as this that people blindly follow the empire of custom; they will retain the clumsy and absurd form of the carts of their predecessors, because they cannot get wheelwrights to make them on any other plan, or because they will not risk the trial of any which are made differently; but when it relates to opinion whether the barrow goes easier with or

without the sail, the most prejudiced cannot resist the manifest evidence of his senses as connected with his own interest,

ROPE-WALKS.

THE Chinese rope-makers might, like those of Europe, employ hemp in their manufacture, since it is one of their own productions; but they give a preference to bamboo, a plant which is very valuable in China, as it is used for almost every purpose, and in every form.

In the accompanying sketch, the rope-makers weave their string horizontally, as in Europe; but this is not always the case: when the rope is very large, a ship's cable, for example, it is manufactured vertically. The workmen are mounted on a scaffold of twelve or fifteen feet long, and twist very long and fine filaments of bamboo. The rope descends as fast, as it is made, into a hole filled with urine: this acid liquid at the



A. P. Smith, sculpsit

ROPE MAKERS.

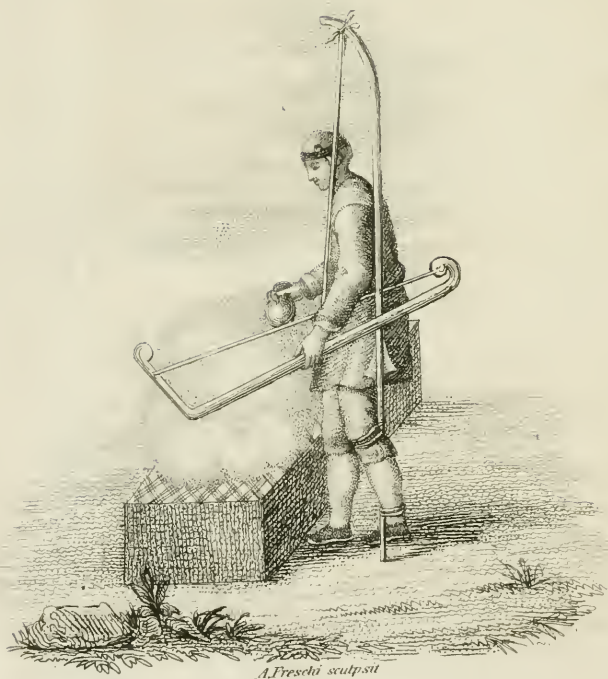
same time strengthens and gives elasticity to the rope.

Thus in this industrious nation, as in England, the most disgusting and filthy matters are turned to profit and essential use. The dung of man and beast is assiduously collected into earthen jars by old men and children, who are constantly running up and down the country, and apply it as a rich manure to the soil.

From the Chinese was derived the invention of the vegetable powder, inodore, manufactured at Montfaucon, near Paris.

On the subject of the manure which the agriculturists prefer, we find from Lord Macartney, that the Chinese farmers commonly place large pots buried up to the top near the public roads for the convenience of the passengers who may have occasion to use them; and the Chinese place so high a value on this

principal ingredient of their manure, that the most infirm old man is never considered absolutely useless to the family which maintains him.



A. Freschi sculpsit

BOWING COTTON.

Pub. 18 April 1812. by LL. Stockdale & Pall Mall

A COTTON-BOWER.

THE hot provinces of China are very favourable to the culture of cotton, and particularly to herbaceous cotton. This valuable plant is distinguished into two principal species; one which grows in the form of a shrub, and is called the cotton-tree, and the other in that of a herb, which is called herbaceous cotton—*Gossypium herbaceum*.

This last species grows even in the northern part of China, and furnishes the finest cotton. The cotton is not drawn, like the threads of hemp and flax, from the rind of the plant, but from a silky down which surrounds the fruit. The proper colour of the cotton is white, but, in the province of Kiang-Nan, of which Nankin is the capital, is a beautiful cotton of a

yellow-red, which retains the same shade when it is spun and woven. With this cotton it is that the Nankin cloths are made, commonly called nankeens.

The fruit of the cotton is gathered by the hand, with only three fingers. The down is extracted and laid on a sheet of paper, and is afterwards exposed to the sun for three days : after which it is cleansed by mills to separate it from the husk. This operation not being sufficient to remove the most tenacious husks and heterogeneous matters, the remainder of the process is performed by a man on the frame herein represented.

The down of the cotton is collected on a large table : the workman fastens, to one of his legs, an elastic bamboo rod, which passes along his body to about two feet above his head. This flexible rod is bent by a gut line, which is joined to a large wooden bow, the string of which he strikes with a small mallet. The bow,

put in motion, runs over the whole surface of the cotton, and cleanses it from the husks and dirt.

The herbaceous cotton requires a good soil, rather damp, well cultivated, and well manured. The same plants will serve three years; when they are rooted out, and the ground is alternately sowed with barley or millet.

Although their ground is calculated to produce cotton-trees in abundance, the Chinese prefer the cultivation of tea, which is much more productive. The consequence is, that they have removed their cotton-trees in many provinces, and purchase, from foreigners at Canton, the Surat cotton. The English supply them with forty to sixty thousand bales, of several millions weight.

This prodigious consumption is not surprising, if it is considered that almost all the inhabitants of China are clad in

cotton cloths. The common people generally wear them of a blue colour, indigo being very plentiful in China. Most of the peasantry cultivate a small field of indigo near their cottage; and from that they obtain the materials requisite for colouring the clothes used by the family.

Indigo is a blue sediment or farina, extracted from the indigo plant.

AN ACCOUNT OF THE CHINESE TOMBS;
PARTICULARLY THOSE OF THE EMPE-
RORS, AND OF THE PRINCES OF THE
BLOOD.

WE have already adverted to the respect which the Chinese entertain for their ancestors, and the care with which they keep up their tombs; but these monuments, the last refuge of the pride and weakness of mankind, perish like the rest. The extinction or dispersion of a family is the period of the destruction of their tombs, which have been erected at great expense; nor can it be otherwise.

Where would China be, very wisely observed a missionary, had it preserved all the stones heaped on stones, bricks on bricks, and timber on timber, which has been converted into palaces, towers,

triumphal arches, pyramids, mausoleums, tombs, and so many other fantastic or mean edifices?

The tombs of the emperors have been respected no more than the others: the sovereigns of one dynasty pay no attention to repairing the monuments of those which preceded them; on the contrary, they have sometimes, from jealousy, or inveteracy, ordered them to be rased.

The founder of the Yuen dynasty, say the annals of China, of the year 1295, ordered the tombs and burial-places of the preceding race to be overthrown.

The person to whom this order was given, was not satisfied with levelling and destroying them even to their very foundations; but, after tearing up the corpses, stript them of every mark of their former grandeur, took away the gold, jewels, and ornaments, profaned their bones, and carried his barbarity to the extreme of

converting their skulls into utensils, drinking-cups, &c.

The emperor put him into prison ; but, as this profaner of the asylum of the dead was at large a few days afterwards, without having received any other punishment, it was believed that he acted under private orders, and that he had merely been ostensibly arrested, not to outrage too glaringly the popular predilection.

These monuments were clumsily simple. In the time of Confucius, they merely raised a mound of earth over the grave. Confucius thus remarked to his disciples on the tomb in which he had deposited the mortal remains of his parents :

“ It was not customary in former days, as now, to raise heaps of earth as tombs : as for me, who have no fixed residence, I have raised a mound of four feet high,

to point out the exact spot where my father and mother are interred."

In the time of the Chun family, the sepulture consisted wholly in a simple brick tomb; under the Hia dynasty a second coat of stone-work was added; under that of the Chang race, the corpse was put into a double coffin before it was interred in the double vault, and to this last the Tcheou dynasty made various ornamental additions.

The tombs of the mandarins and other distinguished personages of the present day are of a magnificence which equals, if it does not surpass, that of the houses of the living.

Among the wooded declivities of the hills are thousands of tombs, built almost like houses, only on a small scale. They are mostly painted blue, and their fronts ornamented with white columns. They

are from six to eight feet high, and form streets in miniature.

The tombs of people of rank are elevated on terraces built like half-moons. The walls are of stone and the doors of white marble; on which are inscribed the names, rank, and virtues of the deceased. The terraces are sometimes surmounted by obelisks, and planted with weeping cypress-trees; a species of weeping Thuya, and another tree with long drooping boughs, add to the gloomy melancholy of the scene. Sir George Staunton says that the latter is a species unknown in Europe.

The monuments of the Chinese have two roofs, the upper of a violet, the lower of a green colour, and the upper one surmounted by a green globe. The other Chinese monuments have no settled number of roofs. The Ta, or pagodas, which are one hundred and twenty to an hundred and eighty feet high, on a base

of a fourth or fifth part of the height, are always divided into five, seven, or nine stages.

In raising these monuments, the Chinese differ somewhat from the European architects. The ingenious machinery of cranes and capstans, with levers or wheels, by means of which three or four may raise an enormous weight, are scarcely known to them. It is true that, by using less bulky materials, they do not stand in need of very complicated methods.

Workmen may be had in China, as many as are wanted, so that the same motives for economizing labour do not exist; therefore, instead of surrounding an edifice with a scaffold, which is raised with the building itself, a scaffold is constructed on an inclined plane, which they are obliged to raise and remove at every stage. This inclined plane consists of strong bamboos well corded together.

If they want to build a vault, instead of establishing false centres of wood, as our builders do, the Chinese workmen pile pieces of wood one upon another, as if they were stacking it. The Chinese vaults have no key-stones; they consist of stones, all of an angular shape, bending perpendicularly to the centre, each supporting the other. This arrangement of the stones has been philosophically compared to many rivals, who, all wishing to attain the same object, operate diametrically against each other.

END OF VOL. II.



